ENVIRONMENTAL LAW & POLICY CENTER
Protecting the Midwest's Environment and Natural Heritage

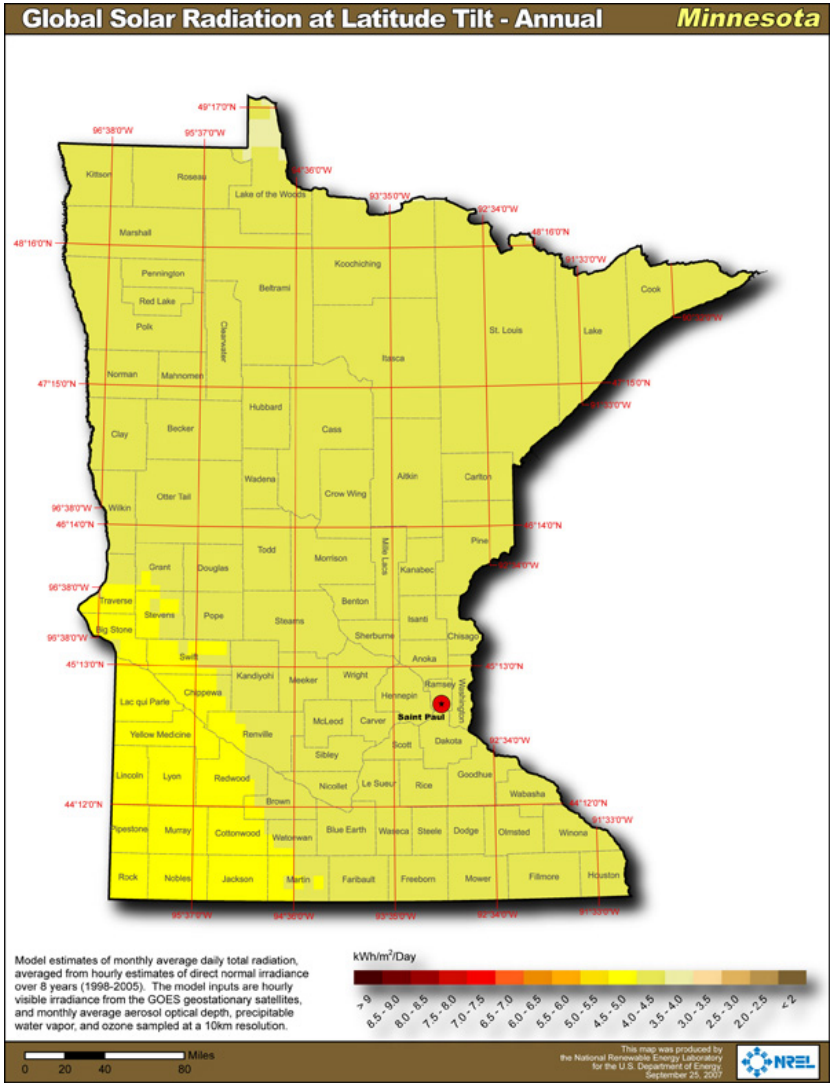
THE Vote Solar INITIATIVE

Value of Solar

in Minnesota

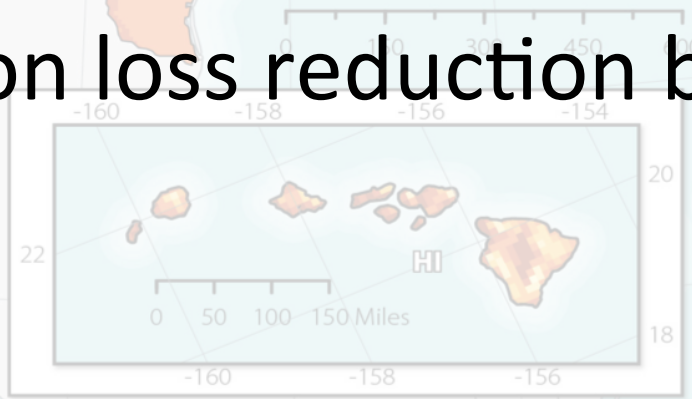
Summary

- DOC Process
- VOST Structure
- Definitions/Terms
- Load Patterns
- Generation Curve
- Individual Values



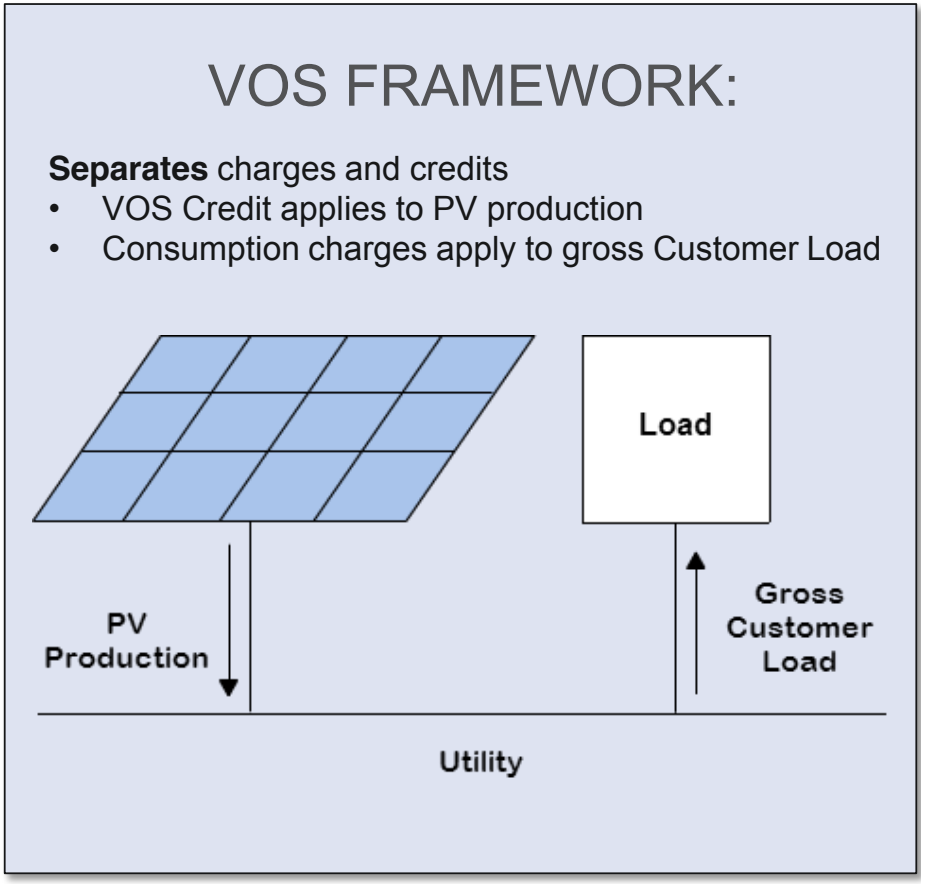
On the Right Track

- VOS Methodology Objectives
- Pay for performance
- Current VOST: current penetration levels
- 25 year term-fixed rate; annual update
- Expansive view of value components
- Good insight on loss reduction benefits

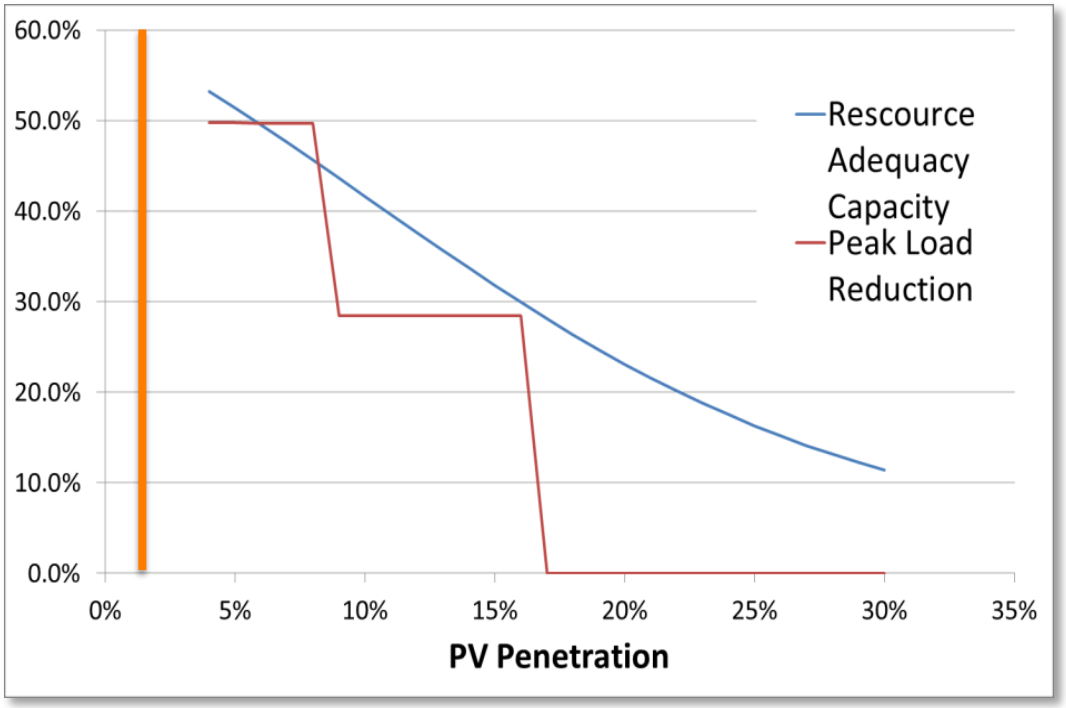


VOST = *Two* Transactions

- **No unrecovered cost issues**
- **Characteristics of host customer irrelevant**
- **Cost of PV system (installation & operating) is irrelevant**
- **Customer revenue and charges netted on utility bill**

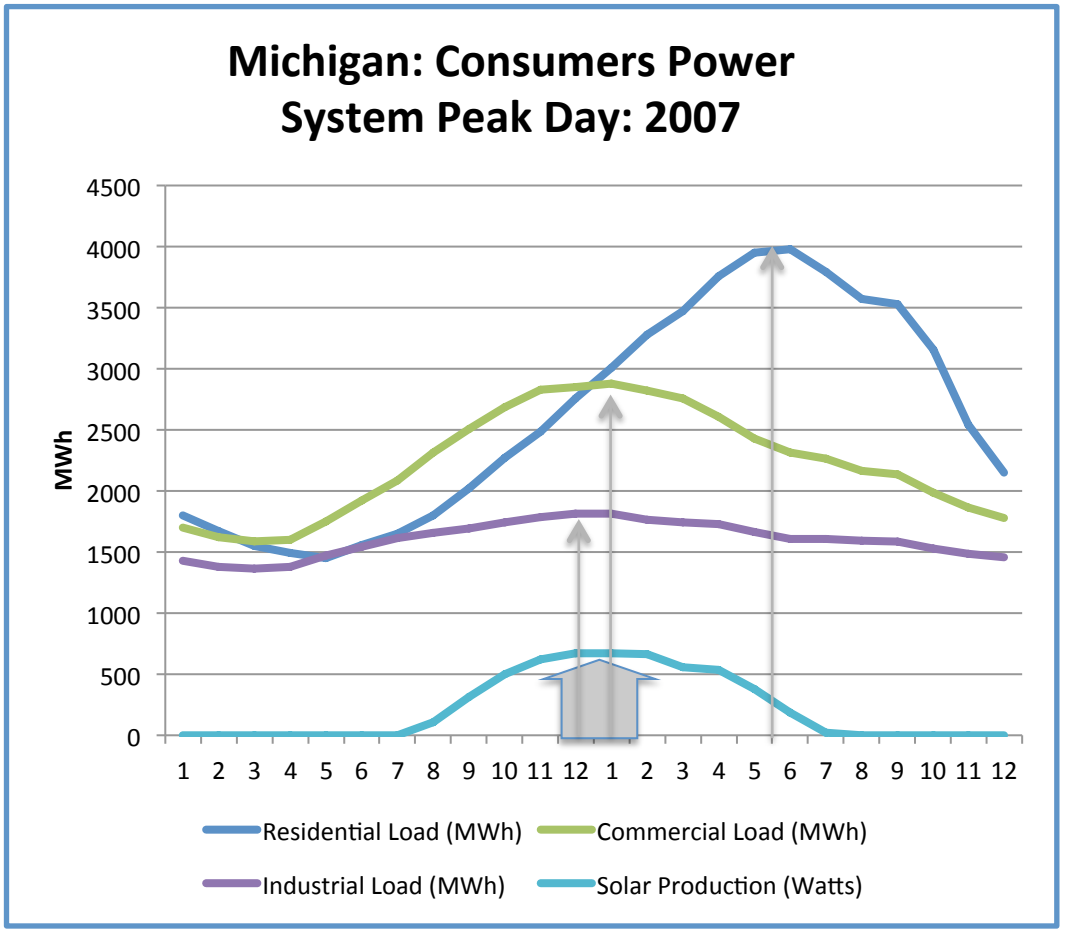


Use of Terms



- *High Penetration*:
- *Capacity Factor*: Use publicly available source such as PV Watts. Also can use PVWatts for differing orientations, but convention should be selected.
- Discount Rate: Utility, societal, …
- Others, as arising …

Load Patterns



- **May change over time with EVs, etc.**
- **Consider DR & load shifting *towards* solar peak**
- **Consider load as a variable**
- **Data transparency a must**

Solar Generation Curve: Differing Views

- DOC: Calculate for Utility "fleet" of resources
- *Recommendation*
  - Calculate for optimum orientation
  - Less than optimum orientations receive lower payments
  - Consider utility-specific extra credits
    - Southwest orientation
    - Areas of congestion
    - Matching with distribution circuit profile

Comments on Individual Values

Value	Comment
Avoided Energy Costs	Use caution with production modeling & marginal heat rates
Fuel Price Guarantee	Value of 25 year fixed price gas contract
Generation Capacity Credit	ELCC must be transparent and verifiable; Test LDC-based methods
Avoided/deferred Distribution Upgrades	Customer mix on distribution circuits
Environmental Benefits	Calculate each marginal benefit; not simply a “catch-all” mechanism like RECs
Economic Development Benefits	Jobs in MN substitute for out of state fuel resources
Discount Rate	Discuss utility, societal, etc.

Thanks

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